

#7



OIPE

## RAW SEQUENCE LISTING

DATE: 02/06/2002

PATENT APPLICATION: US/10/031,342

TIME: 19:06:43

Input Set : A:\SEQUENCE (disk).txt

Output Set: N:\CRF3\02062002\J031342.raw

ENTERED

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3 <110> APPLICANT: M&E Biotech A/S
5 <120> TITLE OF INVENTION: Method for down-regulating GDF-8 activity
7 <130> FILE REFERENCE: AutoVacGDF-8 DK 1
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/031,342
C--> 9 <141> CURRENT FILING DATE: 2002-01-18
9 <160> NUMBER OF SEQ ID NOS: 23
11 <170> SOFTWARE: PatentIn Ver. 2.1
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 375
16 <212> TYPE: PRT
17 <213> ORGANISM: Homo sapiens
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21 1 5 10 15
23 Val Ala Gly Pro Val Asp Leu Asn Glu Asn Ser Glu Gln Lys Glu Asn
24 20 25 30
26 Val Glu Lys Glu Gly Leu Cys Asn Ala Cys Thr Trp Arg Gln Asn Thr
27 35 40 45
29 Lys Ser Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu
30 50 55 60
32 Arg Leu Glu Thr Ala Pro Asn Ile Ser Lys Asp Val Ile Arg Gln Leu
33 65 70 75 80
35 Leu Pro Lys Ala Pro Pro Leu Arg Glu Leu Ile Asp Gln Tyr Asp Val
36 85 90 95
38 Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His
39 100 105 110
41 Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe Leu
42 115 120 125
44 Met Gln Val Asp Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser
45 130 135 140
47 Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr Leu
48 145 150 155 160
50 Arg Pro Val Glu Thr Pro Thr Thr Val Phe Val Gln Ile Leu Arg Leu
51 165 170 175
53 Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser Leu
54 180 185 190
56 Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp Val
57 195 200 205
59 Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu Gly
60 210 215 220
62 Ile Glu Ile Lys Ala Leu Asp Glu Asn Gly His Asp Leu Ala Val Thr
63 225 230 235 240
65 Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val Lys

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66          245          250          255
68 Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly Leu Asp Cys
69          260          265          270
71 Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr Val
72          275          280          285
74 Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg Tyr
75          290          295          300
77 Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln Lys
78 305          310          315          320
80 Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser Ala
81          325          330          335
83 Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr
84          340          345          350
86 Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro Ala Met Val
87          355          360          365
89 Val Asp Arg Cys Gly Cys Ser
90          370          375
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94 <211> LENGTH: 362
95 <212> TYPE: PRT
96 <213> ORGANISM: Meleagris gallopavo
98 <400> SEQUENCE: 2
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100 1          5          10          15
102 Thr Glu Asn Ala Glu Lys Asp Gly Leu Cys Asn Ala Cys Thr Trp Arg
103          20          25          30
105 Gln Asn Thr Lys Ser Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu
106          35          40          45
108 Ser Lys Leu Arg Leu Glu Gln Ala Pro Asn Ile Ser Arg Asp Val Ile
109          50          55          60
111 Lys Gln Leu Leu Pro Lys Ala Pro Pro Leu Gln Glu Leu Ile Asp Gln
112 65          70          75          80
114 Tyr Asp Val Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp
115          85          90          95
117 Asp Tyr His Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser
118          100          105          110
120 Asp Phe Leu Val Gln Met Glu Gly Lys Pro Lys Cys Cys Phe Phe Lys
121          115          120          125
123 Phe Ser Ser Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp
124          130          135          140
126 Ile Tyr Leu Arg Gln Val Gln Lys Pro Thr Thr Val Phe Val Gln Ile
127 145          150          155          160
129 Leu Arg Leu Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile
130          165          170          175
132 Arg Ser Leu Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser
133          180          185          190
135 Ile Asp Val Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser
136          195          200          205
138 Asn Leu Gly Ile Glu Ile Lys Ala Phe Asp Glu Asn Gly Arg Asp Leu

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139      210      215      220
141 Ala Val Thr Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu
142 225      230      235      240
144 Glu Val Arg Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly
145      245      250      255
147 Leu Asp Cys Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro
148      260      265      270
150 Leu Thr Val Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro
151      275      280      285
153 Lys Arg Tyr Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe
154      290      295      300
156 Leu Gln Lys Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg
157 305      310      315      320
159 Gly Ser Ala Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn
160      325      330      335
162 Met Leu Tyr Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro
163      340      345      350
165 Ala Met Val Val Asp Arg Cys Gly Cys Ser
166      355      360
169 <210> SEQ ID NO: 3
170 <211> LENGTH: 375
171 <212> TYPE: PRT
172 <213> ORGANISM: Gallus sp.
174 <400> SEQUENCE: 3
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176 1 5 10 15
178 Ala Val Asp Pro Val Ala Leu Asp Gly Ser Ser Gln Pro Thr Glu Asn
179 20 25 30
181 Ala Glu Lys Asp Gly Leu Cys Asn Ala Cys Thr Trp Arg Gln Asn Thr
182 35 40 45
184 Lys Ser Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu
185 50 55 60
187 Arg Leu Glu Gln Ala Pro Asn Ile Ser Arg Asp Val Ile Lys Gln Leu
188 65 70 75 80
190 Leu Pro Lys Ala Pro Pro Leu Gln Glu Leu Ile Asp Gln Tyr Asp Val
191 85 90 95
193 Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His
194 100 105 110
196 Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe Leu
197 115 120 125
199 Val Gln Met Glu Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser
200 130 135 140
202 Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr Leu
203 145 150 155 160
205 Arg Gln Val Gln Lys Pro Thr Thr Val Phe Val Gln Ile Leu Arg Leu
206 165 170 175
208 Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser Leu
209 180 185 190
211 Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp Val

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## RAW SEQUENCE LISTING

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Input Set : A:\SEQUENCE (disk).txt

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212          195          200          205
214 Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu Gly
215          210          215          220
217 Ile Glu Ile Lys Ala Phe Asp Glu Thr Gly Arg Asp Leu Ala Val Thr
218 225          230          235          240
220 Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val Arg
221          245          250          255
223 Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly Leu Asp Cys
224          260          265          270
226 Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr Val
227          275          280          285
229 Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg Tyr
230          290          295          300
232 Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln Lys
233 305          310          315          320
235 Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser Ala
236          325          330          335
238 Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr
239          340          345          350
241 Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro Ala Met Val
242          355          360          365
244 Val Asp Arg Cys Gly Cys Ser
245          370          375
248 <210> SEQ ID NO: 4
249 <211> LENGTH: 376
250 <212> TYPE: PRT
251 <213> ORGANISM: Mus musculus
253 <400> SEQUENCE: 4
254 Met Met Gln Lys Leu Gln Met Tyr Val Tyr Ile Tyr Leu Phe Met Leu
255 1          5          10          15
257 Ile Ala Ala Gly Pro Val Asp Leu Asn Glu Gly Ser Glu Arg Glu Glu
258          20          25          30
260 Asn Val Glu Lys Glu Gly Leu Cys Asn Ala Cys Ala Trp Arg Gln Asn
261          35          40          45
263 Thr Arg Tyr Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys
264          50          55          60
266 Leu Arg Leu Glu Thr Ala Pro Asn Ile Ser Lys Asp Ala Ile Arg Gln
267 65          70          75          80
269 Leu Leu Pro Arg Ala Pro Pro Leu Arg Glu Leu Ile Asp Gln Tyr Asp
270          85          90          95
272 Val Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr
273          100          105          110
275 His Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe
276          115          120          125
278 Leu Met Gln Ala Asp Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser
279          130          135          140
281 Ser Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr
282 145          150          155          160
284 Leu Arg Pro Val Lys Thr Pro Thr Thr Val Phe Val Gln Ile Leu Arg

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Input Set : A:\SEQUENCE (disk).txt

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```

285          165          170          175
287 Leu Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser
288          180          185          190
290 Leu Lys Leu Asp Met Ser Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp
291          195          200          205
293 Val Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu
294          210          215          220
296 Gly Ile Glu Ile Lys Ala Leu Asp Glu Asn Gly His Asp Leu Ala Val
297 225          230          235          240
299 Thr Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val
300          245          250          255
302 Lys Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly Leu Asp
303          260          265          270
305 Cys Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr
306          275          280          285
308 Val Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg
309          290          295          300
311 Tyr Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln
312 305          310          315          320
314 Lys Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser
315          325          330          335
317 Ala Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu
318          340          345          350
320 Tyr Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro Ala Met
321          355          360          365
323 Val Val Asp Arg Cys Gly Cys Ser
324          370          375
327 <210> SEQ ID NO: 5
328 <211> LENGTH: 375
329 <212> TYPE: PRT
330 <213> ORGANISM: Bos taurus
332 <400> SEQUENCE: 5
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336 Val Ala Gly Pro Val Asp Leu Asn Glu Asn Ser Glu Gln Lys Glu Asn
337          20          25          30
339 Val Glu Lys Glu Gly Leu Cys Asn Ala Cys Leu Trp Arg Glu Asn Thr
340          35          40          45
342 Thr Ser Ser Arg Leu Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu
343          50          55          60
345 Arg Leu Glu Thr Ala Pro Asn Ile Ser Lys Asp Ala Ile Arg Gln Leu
346 65          70          75          80
348 Leu Pro Lys Ala Pro Pro Leu Leu Glu Leu Ile Asp Gln Phe Asp Val
349          85          90          95
351 Gln Arg Asp Ala Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His
352          100          105          110
354 Ala Arg Thr Glu Thr Val Ile Thr Met Pro Thr Glu Ser Asp Leu Leu
355          115          120          125
357 Thr Gln Val Glu Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser

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## VERIFICATION SUMMARY

DATE: 02/06/2002

PATENT APPLICATION: US/10/031,342

TIME: 19:06:45

Input Set : A:\SEQUENCE (disk).txt

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L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date